

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	22	("6153313").URPN.	USPAT	OR	ON	2006/05/20 11:08
L3	7	("6231998").URPN.	USPAT	OR	ON	2006/05/20 12:53
L4	0	"Zr.sub.3In.sub.4O.sub.12"	USPAT	OR	ON	2006/05/20 12:53
L5	0	"Zr.sub.3Sc.sub.4O.sub.12"	USPAT	OR	ON	2006/05/20 12:54
L6	0	"Zr.sub.3Sc.sub.4O.sub.12"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 12:54
L7	4	zirconia-scandia	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 14:27
L8	0	zirconia-india	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 12:54
L9	1	("5789330").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/20 14:37
L11	4051	(thermal barrier or turbine) and (lanthana or "lanthanum oxide" or "la.sub.2O.sub.3") and (Sc or In or Pr or Nd or Eu or Gd or Yb)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 14:43
L12	414	("thermal barrier" or turbine) and (lanthana or "lanthanum oxide" or "la.sub.2O.sub.3") and (Sc or In or Pr or Nd or Eu or Gd or Yb)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 14:40
L13	1235	(thermal barrier or turbine) and (lanthana or "lanthanum oxide" or "la.sub.2O.sub.3") and (Sc or Pr or Nd or Eu or Gd or Yb)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 14:43
L14	986	(thermal barrier or turbine) and (lanthana or "lanthanum oxide" or "la.sub.2O.sub.3") and (Sc or Pr or Nd or Eu or Gd or Yb) and (zirconia or "zro.sub.2")	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 14:45
L15	23	("thermal barrier" and turbine) and (lanthana or "lanthanum oxide" or "la.sub.2O.sub.3") and (Sc or Pr or Nd or Eu or Gd or Yb) and (zirconia or "zro.sub.2")	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 15:22
L16	1	("5789330").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/20 15:23
L17	1	("6558814").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/20 15:26

## EAST Search History

L18	24905	(lanthana or la or terbi\$2 or tb or thuli\$2 or tm or luteti\$2 or lu or "La.sub.2O.sub.3" or "tb.sub.2O.sub.3" or "tm.sub.2O.sub.3" or "Lu.sub.2O.sub.3") and ("HfO.sub.2" or hafn\$2 or "CeO.sub.2" or ceri\$2)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 15:31
L19	149	(lanthana or la or terbi\$2 or tb or thuli\$2 or tm or luteti\$2 or lu or "La.sub.2O.sub.3" or "tb.sub.2O.sub.3" or "tm.sub.2O.sub.3" or "Lu.sub.2O.sub.3") and ("HfO.sub.2" or hafn\$2 or "CeO.sub.2" or ceri\$2) and turbine and (thermal near barrier)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 15:32
L20	47	(lanthana or la or terbi\$2 or tb or thuli\$2 or tm or luteti\$2 or lu or "La.sub.2O.sub.3" or "tb.sub.2O.sub.3" or "tm.sub.2O.sub.3" or "Lu.sub.2O.sub.3") and ("HfO.sub.2" or hafn\$2 or "CeO.sub.2" or ceri\$2) and turbine and (thermal near barrier) and (sic or "si.sub.3N.sub.4" or carbide or nitride)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 16:26
L21	17	(lanthana or la or terbi\$2 or tb or thuli\$2 or tm or luteti\$2 or lu or "La.sub.2O.sub.3" or "tb.sub.2O.sub.3" or "tm.sub.2O.sub.3" or "Lu.sub.2O.sub.3") and ("HfO.sub.2" or hafn\$2) and ("CeO.sub.2" or ceri\$2) and turbine and (thermal near barrier) and (sic or "si.sub.3N.sub.4" or carbide or nitride)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 16:36
L22	1	("20030049470").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/20 17:21
L23	140	((india or scandia) and ceria and hafnia) and "thermal barrier" and turbine	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/20 17:23
S1	636	turbine and ("single crystal" or monolith\$2) and ("ceO.sub.2" or ceria)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:28
S2	643	turbine and (("single crystal" or monolith\$2 or composite) same ceramic) and ("ceO.sub.2" or ceria)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/17 17:54
S3	141	turbine and (("single crystal" or monolith\$2 or composite) same ceramic) and ("ceO.sub.2" or ceria) and "thermal barrier"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 07:44

## EAST Search History

S8	7120	(428/408,446,688).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/18 07:47
S9	141	turbine and ("single crystal" or monolith\$2 or composite) same ceramic) and ("ceO.sub.2" or ceria) and "thermal barrier"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 07:48
S10	5	S8 and S9	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 10:59
S11	220	(thermal near barrier) and ("La.sub.2O.sub.3" or lanthana or "Pr.sub.2O.sub.3" or praseodymia or "Nd.sub.2O.sub.3" or neodymia or "Pm.sub.2O.sub.3" or promethia or "Sm.sub.2O.sub.3" or samaria or "Eu.sub.2O.sub.3" or europia or "Gd.sub.2O.sub.3" or gadolinia or "Tb.sub.2O.sub.3" or Terbia or "Dy.sub.2O.sub.3" or dysprosia or "Ho.sub.2O.sub.3" or holmia or "Er.sub.2O.sub.3" or erbia or "Tm.sub.2O.sub.3" or thulia or "Yb.sub.2O.sub.3" or ytterbia or "Lu.sub.2O.sub.3" or lutetia) and ("CeO.sub.2" or ceria)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 11:14
S12	152	(thermal near barrier) and ("La.sub.2O.sub.3" or lanthana or "Pr.sub.2O.sub.3" or praseodymia or "Nd.sub.2O.sub.3" or neodymia or "Pm.sub.2O.sub.3" or promethia or "Sm.sub.2O.sub.3" or samaria or "Eu.sub.2O.sub.3" or europia or "Gd.sub.2O.sub.3" or gadolinia or "Tb.sub.2O.sub.3" or Terbia or "Dy.sub.2O.sub.3" or dysprosia or "Ho.sub.2O.sub.3" or holmia or "Er.sub.2O.sub.3" or erbia or "Tm.sub.2O.sub.3" or thulia or "Yb.sub.2O.sub.3" or ytterbia or "Lu.sub.2O.sub.3" or lutetia) with ("CeO.sub.2" or ceria)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 11:15

## EAST Search History

S13	104	(thermal near barrier) and ("La.sub.2O.sub.3" or lanthana or "Pr.sub.2O.sub.3" or praseodymia or "Nd.sub.2O.sub.3" or neodymia or "Pm.sub.2O.sub.3" or promethia or "Sm.sub.2O.sub.3" or samaria or "Eu.sub.2O.sub.3" or europia or "Gd.sub.2O.sub.3" or gadolinia or "Tb.sub.2O.sub.3" or Terbia or "Dy.sub.2O.sub.3" or dysprosia or "Ho.sub.2O.sub.3" or holmia or "Er.sub.2O.sub.3" or erbia or "Tm.sub.2O.sub.3" or thulia or "Yb.sub.2O.sub.3" or ytterbia or "Lu.sub.2O.sub.3" or lutetia) with ("CeO.sub.2" or ceria) and turbine	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 17:36
S14	1	("6844075").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/18 12:40
S15	1	("6258467").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/18 15:29
S17	8	(thermal near barrier) and ("La.sub.2O.sub.3" or lanthana or "Pr.sub.2O.sub.3" or praseodymia or "Nd.sub.2O.sub.3" or neodymia or "Pm.sub.2O.sub.3" or promethia or "Sm.sub.2O.sub.3" or samaria or "Eu.sub.2O.sub.3" or europia or "Gd.sub.2O.sub.3" or gadolinia or "Tb.sub.2O.sub.3" or Terbia or "Dy.sub.2O.sub.3" or dysprosia or "Ho.sub.2O.sub.3" or holmia or "Er.sub.2O.sub.3" or erbia or "Tm.sub.2O.sub.3" or thulia or "Yb.sub.2O.sub.3" or ytterbia or "Lu.sub.2O.sub.3" or lutetia) with ("CeO.sub.2" or ceria) and turbine and monolith\$2	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:43
S18	1	"10803527"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:49
S19	0	"any bond coating known in the art"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:50
S20	0	"any bond coat known in the art"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:50
S21	0	"bond coat known in the art"	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:51

## EAST Search History

S22	559	(bond near coat) and (RE or "rare earth" near \$silicate)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:52
S23	55	(bond near coat) with (RE or "rare earth" near \$silicate)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:52
S24	37	(bond near coat) with (mullite)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:52
S25	27	(bond near coat) with (BSAS)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:53
S26	6	(bond near coat) with (YAG)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:53
S27	9	(bond near coat) with (YAG or garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:54
S28	44	(bond near coat) with (plural or multiple)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:54
S42	18	S24 and S25	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/18 18:59
S43	0	bond same (\$CrAl\$ or aluminide) and bond same (disilicate with (Y and (La or Nd or Pr or Sm or Eu or Gd or Tb or Dy or Ho or Er or tm or yb or lu)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:33
S44	1	bond same (\$CrAl\$ or aluminide) and bond same (disilicate with (La or Nd or Pr or Sm or Eu or Gd or Tb or Dy or Ho or Er or tm or yb or lu))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:34
S45	1	(\$CrAl\$ or aluminide) and bond same (disilicate with (La or Nd or Pr or Sm or Eu or Gd or Tb or Dy or Ho or Er or tm or yb or lu))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:34
S46	1	bond same (disilicate with (La or Nd or Pr or Sm or Eu or Gd or Tb or Dy or Ho or Er or tm or yb or lu))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:35

## EAST Search History

S47	1	bond same ("La.sub.2Si.sub.2O.sub.7" or "Nd.sub.2Si.sub.2O.sub.7" or "Pr.sub.2Si.sub.2O.sub.7" or "Sm.sub.2Si.sub.2O.sub.7" or "Eu.sub.2Si.sub.2O.sub.7" or "Gd.sub.2Si.sub.2O.sub.7" or "Tb.sub.2Si.sub.2O.sub.7" or "Dy.sub.2Si.sub.2O.sub.7" or "Ho.sub.2Si.sub.2O.sub.7" or "Er.sub.2Si.sub.2O.sub.7" or "tm.sub.2Si.sub.2O.sub.7" or "yb.sub.2Si.sub.2O.sub.7" or "lu.sub.2Si.sub.2O.sub.7")	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:38
S48	4	bond same (("La.sub.2Si.sub.2O.sub.7" or "Nd.sub.2Si.sub.2O.sub.7" or "Pr.sub.2Si.sub.2O.sub.7" or "Sm.sub.2Si.sub.2O.sub.7" or "Eu.sub.2Si.sub.2O.sub.7" or "Gd.sub.2Si.sub.2O.sub.7" or "Tb.sub.2Si.sub.2O.sub.7" or "Dy.sub.2Si.sub.2O.sub.7" or "Ho.sub.2Si.sub.2O.sub.7" or "Er.sub.2Si.sub.2O.sub.7" or "tm.sub.2Si.sub.2O.sub.7" or "yb.sub.2Si.sub.2O.sub.7" or "lu.sub.2Si.sub.2O.sub.7") or ("rare earth" or lanthanide)near disilicate))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 07:42
S49	16	turbine and (("La.sub.2Si.sub.2O.sub.7" or "Nd.sub.2Si.sub.2O.sub.7" or "Pr.sub.2Si.sub.2O.sub.7" or "Sm.sub.2Si.sub.2O.sub.7" or "Eu.sub.2Si.sub.2O.sub.7" or "Gd.sub.2Si.sub.2O.sub.7" or "Tb.sub.2Si.sub.2O.sub.7" or "Dy.sub.2Si.sub.2O.sub.7" or "Ho.sub.2Si.sub.2O.sub.7" or "Er.sub.2Si.sub.2O.sub.7" or "tm.sub.2Si.sub.2O.sub.7" or "yb.sub.2Si.sub.2O.sub.7" or "lu.sub.2Si.sub.2O.sub.7") or ("rare earth" or lanthanide)near disilicate))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 08:06
S50	4	turbine and mullite and BSAS and YAG	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 11:31
S51	1	("5985470").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/19 12:25
S52	1	("20040028941").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/19 12:25
S53	9	(bond near coat) with (YAG or garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 12:56

## EAST Search History

S54	3	(bond near coat) with (("rare earth" or ytterbium) with garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 12:59
S55	10	((thermal near barrier) or turbine) with (("rare earth" or ytterbium) with garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:07
S56	13	((thermal near barrier) or turbine) same (("rare earth" or ytterbium) with garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:07
S57	57	((thermal near barrier) or turbine) and (("rare earth" or ytterbium) with garnet)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:39
S58	388	(thermal near barrier) and (scandia or "Sc.sub.2O.sub.3" or (scandium near oxide))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:42
S59	144	(thermal near barrier) and ((scandia or "Sc.sub.2O.sub.3" or (scandium near oxide)) same bond)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:41
S60	346	turbine and (thermal near barrier) and (scandia or "Sc.sub.2O.sub.3" or (scandium near oxide))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:42
S61	253	turbine and (ceramic with substrate) and (thermal near barrier) and (scandia or "Sc.sub.2O.sub.3" or (scandium near oxide))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:44
S62	61	turbine and (ceramic with substrate) and (thermal near barrier) and (scandia or "Sc.sub.2O.sub.3" or (scandium near oxide)) and (mol or mole)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:47
S63	230	turbine and (ceramic with substrate) and (thermal near barrier) and (scandia or "Sc.sub.2O.sub.3" or (scandium near oxide)) and ((mol or mole) or wt or weight)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:48
S64	87	turbine and (ceramic with substrate) and (thermal near barrier) and ((scandia or "Sc.sub.2O.sub.3" or (scandium near oxide)) with ((mol or mol) or wt or weight))	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/19 13:49